CLAIMS

1. A cutting bit for camshaft milling cutters, comprising a substantially cuboidal cutting body (1) with an upper face (2) and a lower face (3) substantially parallel thereto, four side faces (4, 4') and cutting edges (5, 6, 7) which are formed along the lines of intersection of the side faces (4, 4') with the upper face (2) and/or the lower face (3), characterised in that the upper face (2) and/or the lower face (3) have at mutually diagonally oppositely disposed corners raised corner regions (8) which project beyond the plane of the upper and lower faces (2, 3) respectively and which extend to the side faces (4, 4') so that the cutting edges (5, 6, 7) are at least partially formed by the line of intersection of the side faces (4, 4') with the face of the raised corner regions (8).

2. A cutting bit according to claim 1 characterised in that the surfaces of the corner regions (8) are arranged substantially parallel to the plane of the upper and lower faces (2, 3) respectively of the cutting bit and go into the upper face (2) and the lower face (3) respectively by way of inclined transitional faces (11).

3. A cutting bit according to claim 1 or claim 2 characterised in that the cutting edges (5, 6, 7) are formed by the line of intersection of the side surfaces (4, 4') with both the upper face (2) or the lower face (3) and also with the surface of the raised corner regions (8) and also, if present, with the transitional faces (11).

4. A cutting bit according to one of claims 1 to 3 characterised in that it is of a square configuration in plan onto the upper face (2) and the lower face (3) respectively.

5. A cutting bit according to one of claims 1 to 4 characterised in that the raised parts are of a substantially mirror-image symmetrical configuration with respect to at least one diagonal through the upper face (2) or the lower face (3) respectively, preferably of a mirror-image symmetrical configuration with respect to both diagonals through the face (2, 3) in question.

6. A cutting bit according to one of claims 1 to 5 characterised in that the cutting edge parts (6, 7) formed by the side faces (4, 4') and the raised regions (8)

and the transitional faces (11) are of equal length on both sides of a cutting corner (9).

7. A cutting bit according to one of claims 1 to 6 characterised in that the side faces (4, 4') are in the form of rake faces.

8. A cutting bit according to one of claims 1 to 7 characterised in that mutually oppositely disposed side faces (4, 4') extend in substantially mutually parallel relationship and that raised corner regions (8) are provided at diagonally mutually opposite corners both of the upper face (2) and also the lower face (3), wherein cutting edges are formed along the lines of intersection both of the upper faces (2) and also of the lower faces (3) including the respective raised corner regions (8) with the respective side faces.

9. A cutting bit according to one of claims 1 to 8 characterised in that the side faces (4') jointly form the shape of a truncated pyramid, in such a way that the upper face (2) is larger than the lower face (3), wherein cutting edges (5, 6, 7) are provided only at the transition of the side faces (4') to the upper face (2).

10. A disc milling cutter, in particular for the production of camshafts or crankshafts, comprising a main portion in the form of a cylindrical disc (55), along the periphery of which are provided devices (50) for mounting and fixing cutting bits (10, 11, 12), characterised in that the devices for mounting cutting bits are designed for mounting cutting bits (10, 11, 12) according to one of claims 1 to 9.

11. A disc milling cutter according to claim 10 characterised in that the mounting devices have mounting pockets (50) which comprise at least three respectively mutually perpendicularly arranged walls (51, 52, 53), of which one wall (52) extends approximately parallel to a plane defined by the axis and the radius vector facing towards the mounting device, a wall (51) extends approximately perpendicularly to the axis of the cylinder, and the third face (53) extends approximately perpendicularly to a radius vector (R) to the mounting device, characterised in that the third face (53) which extends approximately perpendicularly to the associated radius vector has an opening (54) for receiving a raised corner region (8) of a cutting bit according to one of claims 1 to 9.

12. A disc milling cutter according to one of claims 10 and 11 characterised in that the mounting devices (50) provided along the periphery of the cylindrical disc (55) are provided in the region of an edge at the transition of an end face to the peripheral surface of the cylindrical disc (55).

13. A disc milling cutter according to claim 12 characterised in that the mounting devices for mounting cutting bits are provided along both edges at the transition from the peripheral surface to the two end faces of the cylindrical disc (55).

14. A disc milling cutter according to one of claims 10 to 13 characterised in that the mounting devices for cutting bits are provided at equal spacings along the periphery of the cylindrical disc (55).

15. A disc milling cutter according to claim 14 characterised in that the mounting devices arranged at uniform spacings along both edges of the cylindrical disc (55) are displaced relative to each other in the peripheral direction.

16. A disc milling cutter according to claim 15 characterised in that the width of the cylindrical disc (55) is so matched to the length of the cutting edges (5, 6, 7) of the cutting bits (10, 11, 12) and the depth of the mounting devices (50) in the axial direction of the cylindrical disc (55) is of such a dimension that the active cutting edge parts (5) of the cutting bits, which cutting edge parts extend substantially parallel to the axial direction, along the one edge of the cylindrical disc (55), overlap in the axial direction with the cutting edge parts (5) of the cutting bits along the other edge of the cylindrical disc (55).

17. A disc milling cutter according to claim 16 characterised in that the mounting pockets (50) are of such a configuration and the cutting bits are accommodated in the mounting pockets in such a way that the raised corner regions of the cutting bits (10, 11, 12) respectively define the radially and axially outermost cutting edge region along both edges of the cylindrical disc (55).